

# FARE Abstract Workshop

Michelle Jobes, PhD

FARE Winner 2011, 2012, & 2013

FARE Chief Judge, Pharmacology & Toxicology, 2011

FARE Judge, Radiology/Imaging/PET and Neuroimaging, 2012

# The Basics

- FARE = Fellows Award for Research Excellence
- Open to intramural postdocs
- Must still be at NIH to use award
  - IRTAs, CRTAs, visiting fellows, postdoc level  
Special Volunteers

# Who can apply?

- Open to all intramural postdoc fellows
  - IRTA
  - CRTA
  - Clinical and research fellows
  - Visiting fellows
  - Postdoc level special volunteers
  - Pre-IRTAs currently enrolled in a PhD program and conducting dissertation research at NIH
  - Graduate students currently registered in the NIH Graduate Partnerships Program
- Must be at NIH during fiscal year 2014  
(10/1/14 – 9/30/15)

# What type of data can be used?

- First-author data collected while at NIH
- Recent data
  - Unpublished, submitted, accepted, in press, or published in 2014
- Can be from larger project: emphasize your part (s), put in context to larger project

# When can you apply?

- Now!
- Until March 17, 2014 at 5pm
- Mentor must approve by 3/24 at 5pm



# How are abstracts judged?

- Anonymous
- By study section, by 5 judges
  - attempt to place in first choice section
  - earlier submission = more likely to get first choice
  - 3 postdocs + 2 tenure-track/tenured/staff scientists
- Reviewed, scored, ranked, consensus
  - Top 25% from each section win an award
- Evaluated on 4 criteria
  - Scientific Merit
  - Originality
  - Experimental Design
  - Overall Quality & Presentation

# Judges Score Sheet: Merit & Novelty

On a scale of 1 - 5 (5 = best) evaluate the abstract on the following categories:

## SCIENTIFIC MERIT

- Is the question important to the field?
- Does the question follow from existing data?
- Does the study add significantly to the existing body of knowledge?

## ORIGINALITY

- Is this a novel question?
- Is this a novel approach to the question?
- Is this a novel analysis?

# Judges Score Sheet:

## Design & Communication

### EXPERIMENTAL DESIGN

- Are the techniques sufficient/appropriate/superfluous?
- Does the design lead to the researcher's conclusions?
- Are there appropriate controls?

### OVERALL QUALITY OR PRESENTATION

- Is the background presented in a logical manner leading to the question?
- Are the question and answer stated clearly?
- Is the question appropriate?
- Are the conclusions reasonable given the results?



# FARE abstract vs Meeting abstract

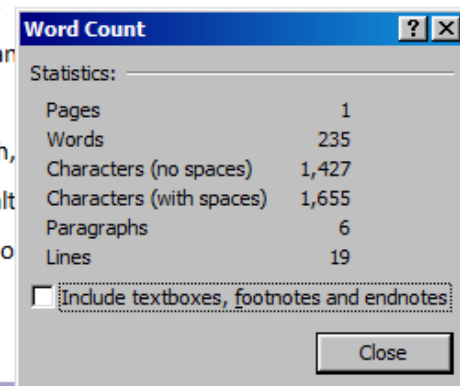
- You can use a previous, recent abstract
- Longer
- FARE version should contain more background than a typical abstract
- Judges can be from any scientific background

# Clonidine Blocks Stress-Induced Craving in Cocaine Users

Michelle L. Jobes<sup>1</sup>, Udi E. Ghitza<sup>2</sup>, David H. Epstein<sup>1</sup>, Karran Preston<sup>1</sup>

<sup>1</sup>Clinical Pharmacology and Therapeutics Research Branch, Institute on Drug Abuse, 251 Bayview Blvd., Suite 200, Baltimore, MD 21218, USA

<sup>2</sup>Center for the Clinical Trials Network, National Institute on Drug Abuse, 3151, MSC 9557, Bethesda, MD 20892-9557, USA.



**Rationale:** Reactivity to stressors and environmental cues, a putative cause of relapse in addiction, may be a useful target for relapse-prevention medication. In rodents, alpha-2 adrenergic agonists such as clonidine block stress-induced reinstatement of drug seeking, but not drug cue-induced reinstatement.

**Objective:** The objective of this study is to test the effect of clonidine on stress and cue-induced craving in human cocaine users.

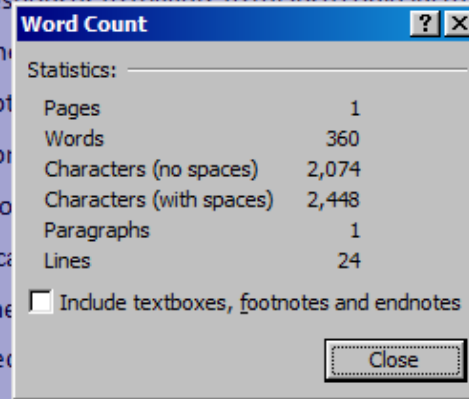
**Methods:** Healthy, non-treatment-seeking cocaine users ( $n = 59$ ) were randomly assigned to three groups receiving clonidine 0, 0.1, or 0.2 mg orally under double-blind conditions. In a single test session, each participant received clonidine or placebo followed 3 h later by exposure to two pairs of standardized auditory-imagery scripts (neutral/stress and neutral/drug). Subjective measures of craving were collected.

**Results:** Subjective responsivity ("crave cocaine" Visual Analog Scale) to stress scripts was significantly attenuated in the 0.1- and 0.2-mg clonidine groups; for drug-cue scripts, this attenuation occurred only in the 0.2-mg group. Other subjective measures of craving showed similar patterns of effects but Dose  $\times$  Script interactions were not significant.

**Conclusions:** Clonidine was effective in reducing stress-induced (and, at a higher dose, cue-induced) craving in a pattern consistent with preclinical findings, although this was significant on only one of several measures. Our results, though modest and preliminary, converge with other evidence to suggest that alpha-2 adrenergic agonists may help prevent relapse in drug abusers experiencing stress or situations that remind them of drug use.

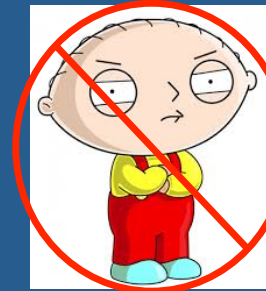
## EFFECTS OF CLONIDINE ON COCAINE CRAVING IN RESPONSE TO STRESS- AND DRUG-RELATED SCRIPTS

Environmental cues and stress have been identified as possible triggers to relapse to drug use, a common problem in addiction. Medications that block responses to triggers to relapse could increase our ability to treat addiction. Data from rodent studies show that clonidine, an  $\alpha_2$ -adrenoceptor agonist, can block stress-induced reinstatement, but not drug priming and cocaine seeking. In this study, we tested whether clonidine could block drug-induced relapse precipitants in humans. Previous studies have shown that clonidine can reduce drug relapse precipitants of drug taking and craving, as well as stressful scenarios, cocaine craving in a lab setting. Cocaine users not seeking treatment were exposed to scripts describing neutral scenarios, a stressful situation unrelated to drug use, and the urge to use cocaine in a drug-taking context. Participants were randomized to one of three groups that received 0 mg (placebo), 0.1 mg, or 0.2 mg clonidine orally, under double-blind conditions, prior to script exposure. Outcome measures included subjective ratings of drug craving and mood, autonomic responses, and endocrine responses. This paper reports on the ratings of cocaine craving, positive affect, and negative affect in response to the stress and drug-cue scripts. Subjective reports of cocaine craving increased after script presentation overall; drug and stress scripts caused the greatest increases in craving. When comparing the effects of the drug and stress scripts with those of the neutral scripts, we found participants who received placebo rated cocaine craving at similar levels after both the stress and drug scripts. After the stress script, the 0.2 mg clonidine group reported significantly less craving than the placebo group. A similar finding occurred with the drug script, but did not reach statistical significance. Clonidine did not have any significant effect on positive or negative affect after either active script compared to the neutral scripts. These results suggest that clonidine may help reduce craving in drug abusers experiencing stressful situations, without significantly affecting their overall mood. As predicted from findings in rodents, clonidine's protective effect was somewhat specific to the effects of a stressor, as distinct from those of drug-related cues.



# Important Details

- Maximum length: 2500 characters,  
*including spaces and carriage returns*
- Sent to your mentor for approval
- No special characters
- One abstract/postdoc
- Cannot resubmit an abstract from last year
  - Same topic okay, content and wording must be >50% different



# Winning!

- No fixed # of winners
- Top 25% of all who apply
- \$1000 to present at a scientific meeting
- Present at the NIH Research Festival, Fall 2014

get one of these:



and these:



# Why should you apply?

- It's free!
- Previous abstract + FARE formatting = Easy!
- You can win money!
- You've got nothing to lose!
- You could get a blue ribbon!
- !!!

Thank you!



Now... go work on your FARE  
abstract!

Title: Drinking and drug use from a prospective perspective

Authors: Jobes, Michelle L., Epstein, David H., Pr

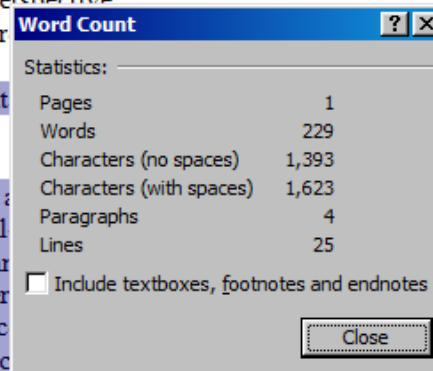
Aim: To investigate the relationships between put  
consumption, and drug use and craving.

Methods: The day-to-day experience of addiction a  
ecological momentary assessment (EMA) as a real  
prospective, longitudinal, cohort study of heroin an  
DSM criteria for alcohol abuse or dependence wer  
participants carried handheld data collection devic  
during all waking hours for up to 25 weeks. Partic  
prompts per day by reporting their locations, moods, and activities, including whether  
they were drinking alcohol. Participants also initiated an entry when they used or craved  
heroin or cocaine; drinking was assessed at these “event-contingent” entries as well.

Results: Participants reported drinking alcohol in 1.6% of random-prompt entries.  
Frequency of drinking was over two times higher in event-contingent entries when  
craving for cocaine and/or heroin was reported, and almost 8 times higher in event-  
contingent entries when actual use of cocaine or heroin was reported.

Conclusions: The association between alcohol and drug use previously established in  
retrospective studies was confirmed here in this prospective EMA study. Even among  
participants with low baseline rates of alcohol consumption, alcohol was associated with  
drug craving and actual use.

Supported by the Intramural Research Program (IRP) of the National Institute on Drug  
Abuse (NIDA), National Institutes of Health.





## Drinking and drug use from a prospective perspective

The relationship between alcohol and drug use has been described almost exclusively by retrospective means. Ecological Momentary Assessment (EMA) allows real-time collection of data on mood, activities, alcohol consumption and illicit drug use. EMA has provided insights into cigarette smoking, dietary habits and psychiatric disorders. Previously, we have used EMA to study precipitants of craving and use of drugs. In a recent study, we examined how craving and use of those drugs is related to day experience of addiction and recovery was examined in a longitudinal cohort study of methadone-maintained heroin users who met DSM criteria for alcohol abuse or dependence who carried handheld computers (PDAs: personal digital assistants) for 25 weeks. Participants reported their locations, mood and drug use prompted (RP) entries per day, and they initiated an entry when they used heroin or cocaine. Alcohol drinking was assessed in both RP and drug use entries. Logistic regression was used to assess the likelihood of drug use vs. craving episodes vs. RP entries, and to assess the intensity of ongoing "background" craving in RP entries. Participants reported drinking alcohol in 1.6% of RP entries. Frequency of drinking was 2.25 times higher in drug-craving episodes than in RP entries ( $p < .0001$ ) and 7.7 times higher in drug-use episodes than in RP entries ( $p < .0001$ ). Frequency of drinking was 3 times higher in drug-use episodes than in craving episodes ( $p < .0001$ ). Within RP entries, the likelihood of drinking increased linearly with intensity of ongoing "background" drug craving ( $p < .0001$ ). The association between alcohol and drug use previously established in retrospective studies was confirmed in this prospective EMA study. Even among participants with low baseline rates of alcohol consumption, alcohol was associated with drug craving and actual use. Drinking alcohol during drug-craving episodes and drug-use episodes was elevated over the base rates assessed by RPs. The likelihood of drinking alcohol increased significantly as the intensity of drug craving increased. The use of EMA enables us to conclude that these relationships are demonstrable in real time in users' normal environments.

